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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/094,052	06/09/98	JONES	P 47513

MM91/0417
DIKE, BRONSTEIN, ROBERTS & CUSHMAN
INTELLECTUAL PROPERTY PRACTICE GROUP
EDWARDS & ANGELL
P.O. BOX 9169
BOSTON MA 02209

EXAMINER	
NGUYEN, T	
ART UNIT	PAPER NUMBER

2872

DATE MAILED: 04/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/094,052

Applicant(s)

JONES, PETER W.J.

Examiner

Thong Q Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 1998 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 12 is directed to a species that is independent or distinct from the species originally claimed for the following reasons: Claim 12 is directed to a structure of vanes comprises a central concentric circular vane and a plurality of outer vanes being nested concentrically about the central vane. The central vane having a first end and a second end wherein the diameter of the first end is smaller than that of the second end. The outer vanes have one fixed angle. Such a structure as described in the specification at page 6 and shown in figure 13.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 12 has been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Oath/Declaration

2. The objection to the verified Statement Claiming Small entity Status as set forth in the previous Office action (Paper No. 13, page 2) is repeated. *It is noted that in the Amendment at page 3, while applicant has stated that a new verified Statement Claiming Small entity Status will be filed at a later date; however, the Office has not received such a new statement at the time the application is reexamined.*

Drawings

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3. The objections to the drawings as set forth in the previous Office action (Paper No. 2, page 2, elements 2 and 4) are repeated. *It is noted that in the Amendment at page 3, while applicant has stated that a new drawings will be filed at a later date; however, the Office has not received such a new drawings at the time the application is reexamined.*

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-5, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055) in view of Softly (U.S. Patent No. 4,365,866) (both of record).

Jones discloses an apparatus for use with an optical device having a light reflecting surface such as a binocular device, a telescope, a periscope, a rifle scope, a night vision device or the like (see column 1). The apparatus comprises a set of concentric circular vanes ^{disposed in front of the lens unit} for the purpose of reducing the reflection of light incident on the lens reflecting surface of the optical device [while still maintaining a substantially wide field of view] (see column 2, for example). Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the

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apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and 8-9, for example.

Jones also teaches that his optical apparatus has a length-to-width ratio which is equal to or different from the length-to-width ratio of the field of view (see columns 2, 3-4, claims 1 and 13, for example). In the embodiment provided at column 5, Jones has suggested that the vanes are arranged in inclined angles with respect to the lens reflecting surface of the optical device. As a result of such an arrangement, the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes.

Thus, the structure concerning the vanes disposed in front of a lens surface having a curved shape for reduction light reflections incident on the lens surface as provided by Jones meets almost all features recited in the present claims. The only feature missing from the Jones reference is that he does not clearly teach that the first ends of the concentric circular vanes are spaced further apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other. However, such an arrangement of the vanes as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for this conclusion is found in the present specification in which it suggests a variation of arrangements of the vanes. In one variation of arrangement of the vanes, the distance between two adjacent first ends is smaller than the distance between two adjacent second ends. See specification at pages 5-6 and figs. 6-7 and 10-11, for example. *but other both space are fixed (equal)*

While applicant has stated that the inventive device as claimed can provide a

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significant advantage of reducing reflections from a lens surface that is significant curved (see specification at page 6, last three lines through page 7, first two lines; however, such use/arrangement of the vanes as claimed is merely preferred for a lens surface which is significant curved. As such, the result of arrangement of the vanes as claimed will make the reduction in reflection better, and it is not considered as an unexpected result. Further, such a lens surface, which is significant, curved is never recited in the claims.

It is noted that the use of an array of vanes disposed in front of a lens surface having a curved shape for the purpose of reduction light reflections incident on the lens surface wherein the distance between two adjacent first ends near the lens surface of a vane is larger than the distance between two adjacent second ends farther from the lens surface of the vane for the purpose of reduction the light reflection incident on the lens surface is suggested to one skilled in the art as can be seen in the system provided by Softy. In particular, Softy discloses the use of an array of vanes (21) in front of a curved screen (11) and teaches that the vanes are arranged in a manner that the first ends near the curved screen of the vanes is spaced further apart from each other at a different distance than the second ends disposed farther from the curved screen of the vanes are spaced apart from each other. See columns 2-3 and figs. 2-4, in particular, at column 2, lines 52-57 which states: "In a television studio most of the ambient light falls towards the monitor screen from an upward direction rather from the side, and so the horizontally extending slats 21 are suitably positioned to intercept this light which would otherwise be reflected from the screen and impair the quality of the image."

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Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones (column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes as suggested by Softy for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

6. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055, of record) in view of the prior art described at columns 2-3 and shown in figure 2 of the Patent No. 4,929,055 issued to Jones.

See the rejection as set forth in the previous Office action (Paper No. 13, pages 6-8).

Response to Arguments

7. Applicant's arguments filed on 02/12/2001 have been fully considered but they are not persuasive.

A) With regard to the rejection of claims 1-5, 7, and 11, the amendments to the claim 1 has resulted a new ground of rejection.

B) With regard to the rejection of claims 8-9, applicant's arguments provided in the Amendment (Paper No. 15, pages 5-6) have been fully considered but they are not persuasive.

Applicant has argued that Jones does not describe a system for reducing reflection from a surface of an optical lens comprising vane means which produce tubes

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having a length-to-width ratio greater than the length-to-width ratio of the field of view, and a modification of Jones device sufficiently long would lead to undesirable results. Amendment, page 5. The Examiner respectfully disagrees with the applicant's viewpoint. In the rejection, the Examiner has stated that one skilled in the art would modify the combined product by making the vanes sufficiently long for the purpose of increasing the ability of reduction light reflection while still maintaining the field of view. Such a statement should be read in the light of Jones teaching and the prior art described at columns 2-4, in particular, at column 4, lines 4-15 in which the ratio of length-to-width of the tube needs to increase by a small amount or sufficient amount for obtaining the purpose of reduction light reflection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

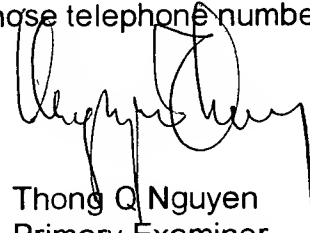
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is 703 308 4814. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703 308 1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 7724 for regular communications and 703 308 7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q Nguyen
Primary Examiner
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April 9, 2001